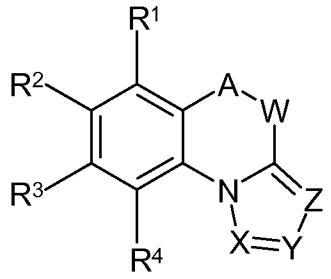
AMENDMENT TO THE CLAIMS

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

In the Claims:

1. (Previously presented) A method of controlling harmful plants or regulating the growth of plants which comprises applying to the plants, to plant seeds or to the area under cultivation an effective amount of one or more compounds of the formula (I) or salts thereof



(I)

wherein:

A-W is N=N, $N^+(O^-)$=N or NR^5-NR^6, wherein A represents the atom or substituted atom shown on the left side of the groups representing A-W;

X is N or CR^7;

Y is N or CR^8;

Z is N or CR^9;

R^1, R^2, R^3 and R^4 are each independently H, OH, halogen, nitro, cyano, formyl, amino, carbamoyl, CO_2H or sulfamoyl, or benzyl or phenoxy,

where each of the latter two radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of (C_1-C_6)alkyl, (C_1-C_6)haloalkyl, halogen, OH, (C_1-C_6)alkoxy, (C_1-C_6)haloalkoxy, (C_1-C_6)alkyl-$S(O)_n$-, nitro, cyano, amino, (C_1-C_6)alkylamino, (C_1-C_6)dialkylamino, (C_1-C_6)alkoxycarbonyl and CO_2H,

or are (C_1-C_6)alkyl, (C_2-C_6)alkenyl, (C_2-C_6)alkynyl, (C_3-C_6)cycloalkyl, (C_3-C_6)cycloalkyl-(C_1-C_6)alkyl-, (C_1-C_6)alkoxy, (C_2-C_6)alkenyloxy, (C_2-C_6)alkynyloxy, (C_1-C_6)alkyl-C(=O)O-, (C_1-C_6)alkyl-$S(O)_n$-, (C_1-C_6)alkylamino, (C_1-C_6)dialkylamino, (C_1-C_6)alkoxycarbonyl, (C_1-C_6)alkylcarbonyl, (C_1-C_6)alkylcarbamoyl, (C_1-C_6)dialkylcarbamoyl, (C_1-C_6)alkylsulfamoyl or (C_1-C_6)dialkylsulfamoyl,

where each of the 18 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, OH, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$alkyl-$S(O)_n$- and in the case of cyclic radicals also $(C_1$-$C_6)$alkyl and $(C_1$-$C_6)$haloalkyl;

R^5 and R^6 are each independently H, $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$haloalkyl, $(C_2$-$C_6)$alkenyl, $(C_2$-$C_6)$alkynyl, formyl, $(C_1$-$C_6)$alkylcarbonyl, $(C_2$-$C_6)$alkenylcarbonyl, COR^{10}, $(C_1$-$C_6)$alkoxycarbonyl, $(C_1$-$C_6)$alkyl-SO_2-, $(C_1$-$C_6)$alkoxy-$(C_1$-$C_6)$alkyl- or R^{10};

R^7, R^8 and R^9 are each independently H, halogen, nitro, cyano, $S(O)_nR^{10}$, $S(O)_nCH_2CO_2R^{11}$, $S(O)_nCH_2CO_2N[(C_1$-$C_6)$alkyl$]_2$, $S(O)_nCH_2CONR^{12}R^{13}$, $S(O)_nCH_2CONR^{14}NR^{15}$, formyl, carbamoyl, OH, SH, R^{10}, $NR^{16}R^{17}$, 1,3-dioxolan-2-yl, $(C_1$-$C_6)$alkyl, $(C_3$-$C_6)$cycloalkyl, $(C_2$-$C_6)$alkenyl, $(C_2$-$C_6)$alkynyl, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$alkyl-$S(O)_n$-, $(C_1$-$C_6)$alkoxycarbonyl, $(C_1$-$C_6)$alkylcarbonyl, $(C_1$-$C_6)$alkylcarbamoyl or $(C_1$-$C_6)$dialkylcarbamoyl, where each of the 10 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, OH, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$alkyl-$S(O)_n$- and in the case of cyclic radicals also $(C_1$-$C_6)$alkyl and $(C_1$-$C_6)$haloalkyl;

R^{10} is $(CH_2)_m$phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$haloalkyl, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$haloalkoxy, nitro, cyano, $(C_1$-$C_6)$alkyl-$S(O)_n$-, $(C_1$-$C_6)$haloalkyl-$S(O)_n$-, amino, $(C_1$-$C_6)$alkylamino, $(C_1$-$C_6)$dialkylamino, $(C_1$-$C_6)$alkylcarbonyl, carbamoyl, $(C_1$-$C_6)$alkylcarbamoyl, $(C_1$-$C_6)$dialkylcarbamoyl, sulfamoyl, $(C_1$-$C_6)$alkylsulfamoyl and $(C_1$-$C_6)$dialkylsulfamoyl;

R^{11} is H or $(C_1$-$C_6)$alkyl;

R^{12} and R^{13}, or R^{16} and R^{17} are each independently H, $(C_1$-$C_6)$alkyl or R^{10}; or R^{12} and R^{13}, or R^{16} and R^{17} together with the respective attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O, S and N, the ring being unsubstituted or substituted by one or more radicals selected from halogen, $(C_1$-$C_6)$alkyl and $(C_1$-$C_6)$haloalkyl;

R^{14} and R^{15} are each independently H or $(C_1$-$C_6)$alkyl;

n is 0, 1 or 2 in each of the occurrences; and

m is 0 or 1;

as a herbicide or plant growth regulator.

2. (Previously presented) The method as claimed in claim 1 wherein A-W is A-W is N=N, $N^{+}(O^{-})$=N or NH-NH.

3. (Previously presented) The method as claimed in claim 1 wherein R^1, R^2, R^3 and R^4 are each independently H, OH, halogen, nitro, cyano, formyl, amino, carbamoyl, CO_2H or sulfamoyl, or benzyl or phenoxy, where each of the latter two radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of (C_1-C_4)alkyl, (C_1-C_4)haloalkyl, halogen, OH, (C_1-C_4)alkoxy, (C_1-C_4)haloalkoxy, (C_1-C_4)alkyl-$S(O)_n$-, nitro, cyano, amino, (C_1-C_4)alkylamino, (C_1-C_4)dialkylamino, (C_1-C_4)alkoxycarbonyl and CO_2H,
or are (C_1-C_4)alkyl, (C_2-C_4)alkenyl, (C_2-C_4)alkynyl, (C_3-C_6)cycloalkyl, (C_3-C_6)cycloalkyl-(C_1-C_4)alkyl-, (C_1-C_4)alkoxy, (C_2-C_4)alkenyloxy, (C_2-C_4)alkynyloxy, (C_1-C_4)alkyl-C(=O)O-, (C_1-C_4)alkyl-$S(O)_n$-, (C_1-C_4)alkylamino, (C_1-C_4)dialkylamino, (C_1-C_4)alkoxycarbonyl, (C_1-C_4)alkylcarbonyl, (C_1-C_4)alkylcarbamoyl, (C_1-C_4)dialkylcarbamoyl, (C_1-C_4)alkylsulfamoyl or (C_1-C_4)dialkylsulfamoyl, where each of the 18 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, OH, (C_1-C_4)alkoxy, (C_1-C_4)alkyl-$S(O)_n$- and in the case of cyclic radicals also (C_1-C_6)alkyl and (C_1-C_6)haloalkyl.

4. (Previously presented) The method as claimed in claim 1, wherein X is N or CR^7 wherein R^7 is H, halogen, nitro, cyano, $S(O)_nR^{10}$, $S(O)_nCH_2CO_2R^{11}$, $S(O)_nCH_2CONR^{12}R^{13}$, $S(O)_nCH_2CONR^{14}NR^{15}$, formyl, carbamoyl, OH, SH, R^{10}, $NR^{16}R^{17}$, 1,3-dioxolan-2-yl, (C_1-C_4)alkyl, (C_3-C_6)cycloalkyl, (C_2-C_4)alkenyl, (C_2-C_4)alkynyl, (C_1-C_4)alkoxy, (C_1-C_4)alkyl-$S(O)_n$-, (C_1-C_4)alkoxycarbonyl, (C_1-C_4)alkylcarbonyl, (C_1-C_4)alkylcarbamoyl, (C_1-C_4)dialkylcarbamoyl, where each of the 10 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, OH, (C_1-C_4)alkoxy and (C_1-C_4)alkyl-$S(O)_n$-; in which
R^{10} is $(CH_2)_m$phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C_1-C_4)alkyl, (C_1-C_4)haloalkyl, (C_1-C_4)alkoxy, (C_1-C_4)haloalkoxy, nitro, cyano, (C_1-C_4)alkyl-$S(O)_n$-, (C_1-C_4)haloalkyl-$S(O)_n$-, amino, (C_1-C_4)alkylamino, (C_1-

C_4)dialkylamino, (C_1-C_4)alkylcarbonyl, carbamoyl, (C_1-C_4)alkylcarbamoyl, (C_1-C_4)dialkylcarbamoyl, sulfamoyl, (C_1-C_4)alkylsulfamoyl and (C_1-C_4)dialkylsulfamoyl;
R^{11} is H or (C_1-C_4)alkyl;
R^{12} and R^{13}, or R^{16} and R^{17} are each independently H, (C_1-C_4)alkyl or R^{10}; or R^{12} and R^{13}, or R^{16} and R^{17} together with the respective attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O,S and N, the ring being unsubstituted or substituted by one or more radicals selected from halogen, (C_1-C_4)alkyl and (C_1-C_4)haloalkyl; and
R^{14} and R^{15} are each independently H or (C_1-C_4)alkyl.

5. (Previously presented) The method as claimed in claim 1 wherein Y and Z are each N.

6. (Previously presented) The method as claimed in claim 1 wherein:
A-W is N=N, $N^+(O^-)$=N or NH-NH;
R^1, R^2, R^3 and R^4 are each independently H, OH, halogen, nitro, cyano, formyl, amino, carbamoyl, CO_2H or sulfamoyl, or benzyl or phenoxy,
where each of the latter two radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of (C_1-C_4)alkyl, (C_1-C_4)haloalkyl, halogen, OH, (C_1-C_4)alkoxy, (C_1-C_4)haloalkoxy, (C_1-C_4)alkyl-$S(O)_n$-, nitro, cyano, amino, (C_1-C_4)alkylamino, (C_1-C_4)dialkylamino, (C_1-C_4)alkoxycarbonyl and CO_2H,
or are (C_1-C_4)alkyl, (C_2-C_4)alkenyl, (C_2-C_4)alkynyl, (C_3-C_6)cycloalkyl, (C_3-C_6)cycloalkyl-(C_1-C_4)alkyl-, (C_1-C_4)alkoxy, (C_2-C_4)alkenyloxy, (C_2-C_4)alkynyloxy, (C_1-C_4)alkyl-C(=O)O-, (C_1-C_4)alkyl-$S(O)_n$-, (C_1-C_4)alkylamino, (C_1-C_4)dialkylamino, (C_1-C_4)alkoxycarbonyl, (C_1-C_4)alkylcarbonyl, (C_1-C_4)alkylcarbamoyl, (C_1-C_4)dialkylcarbamoyl, (C_1-C_4)alkylsulfamoyl or (C_1-C_4)dialkylsulfamoyl,
where each of the 18 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, OH, (C_1-C_4)alkoxy, (C_1-C_4)alkyl-$S(O)_n$- and in the case of cyclic radicals also (C_1-C_6)alkyl and (C_1-C_6)haloalkyl;
X is N or CR^7;
R^7 is H, (C_1-C_4)alkyl, (C_1-C_4)haloalkyl, (C_2-C_4)alkenyl, (C_2-C_4)alkynyl, (C_1-C_4)alkoxy, (C_1-C_4)haloalkoxy, halogen, nitro, cyano, (C_1-C_4)alkyl-$S(O)_n$-, (C_1-C_4)haloalkyl-$S(O)_n$-, $S(O)_nR^{10}$,

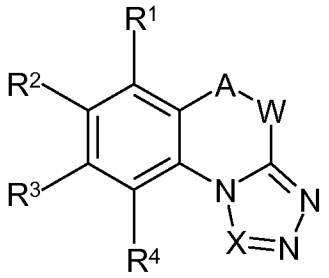
$S(O)_nCH_2CO_2R^{11}$, $S(O)_nCH_2CO_2N[(C_1\text{-}C_4)alkyl]_2$, $S(O)_nCH_2CONR^{12}R^{13}$, $S(O)_nCH_2CONR^{14}NR^{15}$, $(C_1\text{-}C_4)$alkoxycarbonyl, formyl, $(C_1\text{-}C_4)$alkylcarbonyl, $(C_1\text{-}C_4)$haloalkylcarbonyl, carbamoyl, $(C_1\text{-}C_4)$alkylcarbamoyl, $(C_1\text{-}C_4)$dialkylcarbamoyl, OH, SH, R^{10}, $NR^{16}R^{17}$ or 1,3-dioxolan-2-yl; in which

R^{10} is $(CH_2)_m$phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, $(C_1\text{-}C_4)$alkyl, $(C_1\text{-}C_4)$haloalkyl, $(C_1\text{-}C_4)$alkoxy, $(C_1\text{-}C_4)$haloalkoxy, nitro, cyano, $(C_1\text{-}C_4)$alkyl-$S(O)_n$-, $(C_1\text{-}C_4)$haloalkyl-$S(O)_n$-, amino, $(C_1\text{-}C_4)$alkylamino, $(C_1\text{-}C_4)$dialkylamino, $(C_1\text{-}C_4)$alkylcarbonyl, carbamoyl, $(C_1\text{-}C_4)$alkylcarbamoyl, $(C_1\text{-}C_4)$dialkylcarbamoyl, sulfamoyl, $(C_1\text{-}C_4)$alkylsulfamoyl and $(C_1\text{-}C_4)$dialkylsulfamoyl;

R^{11} is H or $(C_1\text{-}C_4)$alkyl;

R^{12} and R^{13}, or R^{16} and R^{17} are each independently H, $(C_1\text{-}C_4)$alkyl or R^{10}; or R^{12} and R^{13}, or R^{16} and R^{17} together with the respective attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O,S and N, the ring being unsubstituted or substituted by one or more radicals selected from halogen, $(C_1\text{-}C_4)$alkyl and $(C_1\text{-}C_4)$haloalkyl; and R^{14} and R^{15} are each independently H or $(C_1\text{-}C_4)$alkyl; and Y and Z are each N.

7. (Previously presented) A compound of formula (Ii):



(Ii)

wherein:

A-W is N=N, $N^+(O^-)$=N or NH-NH, in which A represents the atom or substituted atom shown on the left side of the groups representing A-W;

X is N or CR^7;

R^1, R^2, R^3 and R^4 are each independently H, OH, halogen, nitro, cyano, formyl, amino, carbamoyl, CO_2H or sulfamoyl, or benzyl or phenoxy,

where each of the latter two radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of (C_1-C_6)alkyl, (C_1-C_6)haloalkyl, halogen, OH, (C_1-C_6)alkoxy, (C_1-C_6)haloalkoxy, (C_1-C_6)alkyl-$S(O)_n$-, nitro, cyano, amino, (C_1-C_6)alkylamino, (C_1-C_6)dialkylamino, (C_1-C_6)alkoxycarbonyl and CO_2H,
or are (C_1-C_6)alkyl, (C_2-C_6)alkenyl, (C_2-C_6)alkynyl, (C_3-C_6)cycloalkyl, (C_3-C_6)cycloalkyl-(C_1-C_6)alkyl-, (C_1-C_6)alkoxy, (C_2-C_6)alkenyloxy, (C_2-C_6)alkynyloxy, (C_1-C_6)alkyl-C(=O)O-, (C_1-C_6)alkyl-$S(O)_n$-, (C_1-C_6)alkylamino, (C_1-C_6)dialkylamino, (C_1-C_6)alkoxycarbonyl, (C_1-C_6)alkylcarbonyl, (C_1-C_6)alkylcarbamoyl, (C_1-C_6)dialkylcarbamoyl, (C_1-C_6)alkylsulfamoyl or (C_1-C_6)dialkylsulfamoyl,
where each of the 18 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, OH, (C_1-C_6)alkoxy, (C_1-C_6)alkyl-$S(O)_n$- and in the case of cyclic radicals also (C_1-C_6)alkyl and (C_1-C_6)haloalkyl;

R^7 is H, (C_1-C_6)alkyl, (C_1-C_6)haloalkyl, (C_2-C_6)alkenyl, (C_2-C_6)alkynyl, (C_1-C_6)alkoxy, (C_1-C_6)haloalkoxy, halogen, nitro, cyano, (C_1-C_6)alkyl-$S(O)_n$-, (C_1-C_6)haloalkyl-$S(O)_n$-, (C_1-C_6)alkoxycarbonyl, formyl, (C_1-C_6)alkylcarbonyl, (C_1-C_6)haloalkylcarbonyl, carbamoyl, (C_1-C_6)alkylcarbamoyl, (C_1-C_6)dialkylcarbamoyl, $NR^{16}R^{17}$ or 1,3-dioxolan-2-yl; and

R^{16} and R^{17} are each independently H, (C_1-C_6)alkyl or R^{10}, wherein
R^{10} is $(CH_2)_m$phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C_1-C_6)alkyl, (C_1-C_6)haloalkyl, (C_1-C_6)alkoxy, (C_1-C_6)haloalkoxy, nitro, cyano, (C_1-C_6)alkyl-$S(O)_n$-, (C_1-C_6)haloalkyl-$S(O)_n$-, amino, (C_1-C_6)alkylamino, (C_1-C_6)dialkylamino, (C_1-C_6)alkylcarbonyl, carbamoyl, (C_1-C_6)alkylcarbamoyl, (C_1-C_6)dialkylcarbamoyl, sulfamoyl, (C_1-C_6)alkylsulfamoyl and (C_1-C_6)dialkylsulfamoyl;

with the exclusion of compounds wherein:

i) A-W is N=N; R^1, R^2, R^3 and R^4 are each H; and X is C-Br, CSO_2Me, CSMe, CMe, CH, C-phenyl, C-SH, C-S-$CH_2C_6H_5$, C-S-CH_2COOH, C-S-CH_2CO-morpholino, C-S-CH_2CO-piperidyl, C-(N-methyl-piperazino), C-S-$CH_2CON(i\text{-propyl})_2$ or C-OH;

ii) A-W is N=N; R^1, R^3 and R^4 are each H; R^2 is Cl; and X is CH, C-SH, C-S-$CH_2C_6H_5$, C-S-$CH_2COOC_2H_5$, C-S-CH_2CO-$NHNH_2$ or C-OH;

iii) A-W is N=N; R^2, R^3 and R^4 are each H; R^1 is OH or OCH_3; and X is CH;

iv) A-W is $N^+(O^-)$=N; R^1, R^2, R^3 and R^4 are each H; and X is CH or C-SH;

v) A-W is NH-NH; R^1, R^2, R^3 and R^4 are each H; and X is C-OH, C-(morpholino), C-(N-methyl-piperazino), CSMe or CH;

vi) A-W is NH-NH; R^1, R^3 and R^4 are each H; R^2 is Me; and X is CH;

vii) A-W is N=N; R^1, R^2 and R^4 are each H; R^3 is OMe; and X is N;

viii) A-W is N=N; R^1, R^3 and R^4 are each H; R^2 is OMe, Me or H; and X is N;

ix) A-W is N=N; R^1 and R^3 are each H; R^2 and R^4 are each Me; and X is N;

x) A-W is $N^+(O^-)$=N; R^1, R^3 and R^4 are each H; R^2 is Me or OMe; and X is N;

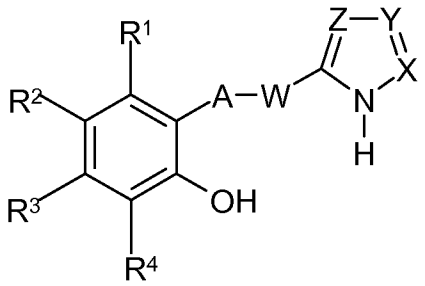
xi) A-W is $N^+(O^-)$=N; R^1 and R^3 are each H; R^2 and R^4 are each Me; and X is N; and

xii) A-W is NH-NH; R^1, R^2, R^3 and R^4 are each H; and X is N and

xii) A-W is NR^5-NR^6, R^1, R^2, R^3 and R^4 are each H; R^5 and R^6 are each acetyl, phenylacetyl or benzoyl, and X is H.

8. (Currently amended) A process for the preparation of a compound of formula (Ii) ~~formula (I)~~, or a salt thereof, as defined in claim 7 which comprises:

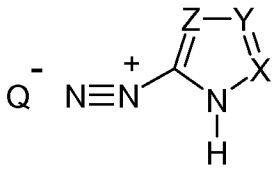
a) where A-W is N=N or $N^+(O^-)$=N, cyclodehydrating a compound of formula (II):



(II)

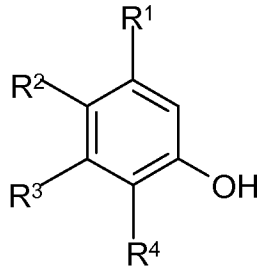
wherein A-W is N=N or $N^+(O^-)$=N, Y is N, Z is N and R^1, R^2, R^3, R^4, and X, ~~Y and Z~~ are as defined in formula (Ii) ~~formula (I)~~; or

b) where A-W is N=N, and the other values are as defined above, coupling a diazonium salt of formula (III):



(III)

wherein ~~X, Y and Z are as defined in formula (I)~~ Y is N, Z is N and X is as defined in formula (Ii) and Q is a chloride, sulfate or fluoroborate, with a compound of formula (IV):



(IV)

wherein R^1, R^2, R^3 and R^4 are as defined in claim 1, to give an azo intermediate of formula (II) wherein A-W is N=N, and the other values are as defined in formula (Ii) ~~formula (I)~~, followed by the above described cyclodehydration; or

~~c) where A-W is NR5-NR6; R1, R2, R3; R4, R6, X, Y and Z are as defined in formula (I), and R5 is as defined in formula (I) with the exclusion of H, reacting the corresponding compound of formula (I) wherein R5 is H, with a compound of formula (VI):~~

~~R5-L (VI)~~

~~wherein R5 is as defined in formula (I) with the exclusion of H, and L is a leaving group; or~~

~~d) where A-W is NR5-NR6; R1, R2, R3; R4, R5, X, Y and Z are as defined in formula (I), and R6 is as defined in formula (I) with the exclusion of H, reacting the corresponding compound of formula (I) wherein R6 is H, with a compound of formula (VII):~~

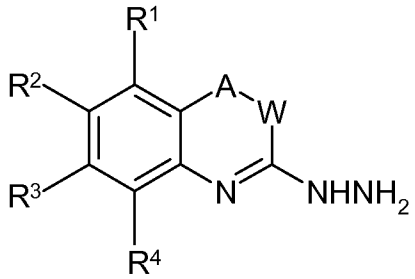
~~R6-L (VII)~~

~~wherein R6 is as defined in formula (I) with the exclusion of H, and L is a leaving group; or~~

~~e)~~ c where A-W is NR^5-NR^6, R^5 and R^6 are each H, and the other values are as defined in formula (Ii) ~~formula (I)~~, reducing the corresponding compound of formula (Ii) ~~formula (I)~~ wherein A-W is N=N or $N^+(O^-)$=N; or

~~f)~~ d where A-W is N=N, and the other values are as defined in formula (Ii) ~~formula (I)~~, reducing the corresponding compound of formula (Ii) ~~formula (I)~~ wherein A-W is $N^+(O^-)$=N; or

~~g)~~ e where A-W is N=N or $N^+(O^-)$=N, X is CR^7, Y and Z are each N, and the other values are as defined in formula (Ii) ~~formula (I)~~, reacting a compound of formula (VIII):



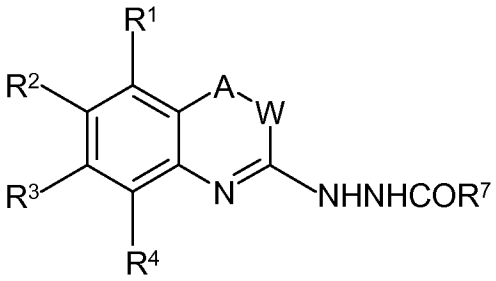
(VIII)

wherein A-W is N=N or $N^+(O^-)$=N, R^7 is H, (C_1-C_6)alkyl, (C_1-C_6)haloalkyl, (C_2-C_6)alkenyl, (C_2-C_6)alkynyl or R^{10}, and R^1, R^2, R^3 and R^4 are as defined in formula (Ii) ~~formula (I)~~, with a carboxylic acid or an equivalent thereof of formula (IX) or (X):

R^7COL^1 (IX) $R^7C(OR)_3$ (X)

wherein R^7 is H, (C_1-C_6)alkyl, (C_1-C_6)haloalkyl, (C_2-C_6)alkenyl, (C_2-C_6)alkynyl or R^{10}, and L^1 is H or a leaving group; or

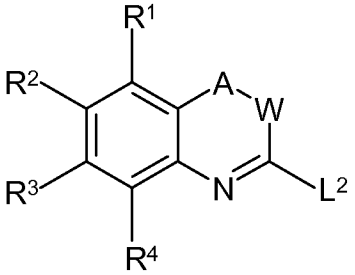
~~h)~~ f where A-W is N=N or $N^+(O^-)$=N, X is CR^7, Y and Z are each N, and the other values are as defined in formula (Ii) ~~formula (I)~~, cyclising a compound of formula (XI):



(XI)

wherein A-W is N=N or $N^+(O^-)$=N, R^7 is H, $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$haloalkyl, $(C_2$-$C_6)$alkenyl, $(C_2$-$C_6)$alkynyl or R^{10}, and R^1, R^2, R^3 and R^4 are as defined in formula (Ii) ~~formula (I)~~, in the presence of a dehydrating agent or a halogenating agent; or

~~i)~~ g where A-W is N=N or $N^+(O^-)$=N, and R^1, R^2, R^3 and R^4 are as defined in formula (Ii) ~~formula (I)~~, reacting a compound of formula (XII):



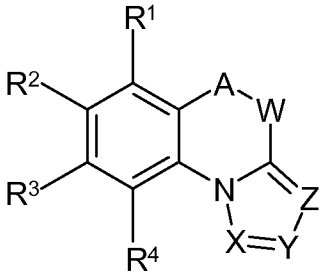
(XII)

wherein A-W is N=N or $N^+(O^-)$=N, R^1, R^2, R^3 and R^4 are as defined in formula (Ii) ~~formula (I)~~, and L^2 is a leaving group, with a metal azide of formula (XIII):

$$M\text{-}N_3 \qquad \text{(XIII)}$$

wherein M is an alkali metal; or

~~j)~~ h where A-W is $N^+(O^-)$=N, and the other values are as defined in formula (Ii) ~~formula (I)~~, oxidising the corresponding compound of formula (I)



(I)

wherein:

A-W is N=N,

X is N or CR^7;

Y is N or CR^8;

Z is N or CR^9;

R^1, R^2, R^3 and R^4 are each independently H, OH, halogen, nitro, cyano, formyl, amino, carbamoyl, CO_2H or sulfamoyl, or benzyl or phenoxy,

where each of the latter two radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$haloalkyl, halogen, OH, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$haloalkoxy, $(C_1$-$C_6)$alkyl-$S(O)_n$-, nitro, cyano, amino, $(C_1$-$C_6)$alkylamino, $(C_1$-$C_6)$dialkylamino, $(C_1$-$C_6)$alkoxycarbonyl and CO_2H,

or are $(C_1$-$C_6)$alkyl, $(C_2$-$C_6)$alkenyl, $(C_2$-$C_6)$alkynyl, $(C_3$-$C_6)$cycloalkyl, $(C_3$-$C_6)$cycloalkyl-$(C_1$-$C_6)$alkyl-, $(C_1$-$C_6)$alkoxy, $(C_2$-$C_6)$alkenyloxy, $(C_2$-$C_6)$alkynyloxy, $(C_1$-$C_6)$alkyl-C(=O)O-, $(C_1$-$C_6)$alkyl-$S(O)_n$-, $(C_1$-$C_6)$alkylamino, $(C_1$-$C_6)$dialkylamino, $(C_1$-$C_6)$alkoxycarbonyl, $(C_1$-$C_6)$alkylcarbonyl, $(C_1$-$C_6)$alkylcarbamoyl, $(C_1$-$C_6)$dialkylcarbamoyl, $(C_1$-$C_6)$alkylsulfamoyl or $(C_1$-$C_6)$dialkylsulfamoyl,

where each of the 18 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, OH, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$alkyl-$S(O)_n$- and in the case of cyclic radicals also $(C_1$-$C_6)$alkyl and $(C_1$-$C_6)$haloalkyl;

R^5 and R^6 are each independently H, $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$haloalkyl, $(C_2$-$C_6)$alkenyl, $(C_2$-$C_6)$alkynyl, formyl, $(C_1$-$C_6)$alkylcarbonyl, $(C_2$-$C_6)$alkenylcarbonyl, COR^{10}, $(C_1$-$C_6)$alkoxycarbonyl, $(C_1$-$C_6)$alkyl-SO_2-, $(C_1$-$C_6)$alkoxy-$(C_1$-$C_6)$alkyl- or R^{10};

R^7, R^8 and R^9 are each independently H, halogen, nitro, cyano, $S(O)_nR^{10}$, $S(O)_nCH_2CO_2R^{11}$, $S(O)_nCH_2CO_2N[(C_1$-$C_6)$alkyl$]_2$, $S(O)_nCH_2CONR^{12}R^{13}$, $S(O)_nCH_2CONR^{14}NR^{15}$, formyl, carbamoyl, OH, SH, R^{10}, $NR^{16}R^{17}$, 1,3-dioxolan-2-yl, $(C_1$-$C_6)$alkyl, $(C_3$-$C_6)$cycloalkyl, $(C_2$-$C_6)$alkenyl, $(C_2$-$C_6)$alkynyl, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$alkyl-$S(O)_n$-, $(C_1$-$C_6)$alkoxycarbonyl, $(C_1$-$C_6)$alkylcarbonyl, $(C_1$-$C_6)$alkylcarbamoyl or $(C_1$-$C_6)$dialkylcarbamoyl, where each of the 10 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, OH, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$alkyl-$S(O)_n$- and in the case of cyclic radicals also $(C_1$-$C_6)$alkyl and $(C_1$-$C_6)$haloalkyl;

R^{10} is $(CH_2)_m$phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, $(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$haloalkyl, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$haloalkoxy, nitro,

cyano, $(C_1$-$C_6)$alkyl-$S(O)_n$-, $(C_1$-$C_6)$haloalkyl-$S(O)_n$-, amino, $(C_1$-$C_6)$alkylamino, $(C_1$-$C_6)$dialkylamino, $(C_1$-$C_6)$alkylcarbonyl, carbamoyl, $(C_1$-$C_6)$alkylcarbamoyl, $(C_1$-$C_6)$dialkylcarbamoyl, sulfamoyl, $(C_1$-$C_6)$alkylsulfamoyl and $(C_1$-$C_6)$dialkylsulfamoyl;

R^{11} is H or $(C_1$-$C_6)$alkyl;

R^{12} and R^{13}, or R^{16} and R^{17} are each independently H, $(C_1$-$C_6)$alkyl or R^{10}; or R^{12} and R^{13}, or R^{16} and R^{17} together with the respective attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O, S and N, the ring being unsubstituted or substituted by one or more radicals selected from halogen, $(C_1$-$C_6)$alkyl and $(C_1$-$C_6)$haloalkyl;

R^{14} and R^{15} are each independently H or $(C_1$-$C_6)$alkyl;

n is 0, 1 or 2 in each of the occurrences; and

m is 0 or 1.

9. (Previously presented) A herbicidal or plant growth regulating composition characterised in that it comprises one or more compounds of the formula (Ii) or salts thereof as defined in claim 7 and formulation auxiliaries which are customary in crop protection.

10. (Cancelled)

11. (Currently amended) The compound of claim 7 ~~claim 1~~, wherein X is N.

12. (Previously presented) The compound of claim 7, wherein X is CR^7; R^1, R^3, and R^4 is hydrogen; and R^2 is hydrogen, halogen or C_1-C_6 alkyl.

13. (Previously presented) The compound of claim 12, wherein R^2 is hydrogen, chloro, bromo or methyl.

14. (Previously presented) The compound of claim 7, wherein A-W is N=N or $N^+(O^-)$=N.

15. (Previously presented) The method of claim 5, wherein X is N.

16. (Previously presented) The method of claim 5, wherein X is CR^7; R^1, R^3, and R^4 is hydrogen; and R^2 is hydrogen, halogen or C_1-C_6 alkyl.

17. (Previously presented) The method of claim 16, wherein R^2 is hydrogen, chloro, bromo or methyl.

18. (Previously presented) The method of claim 5, wherein A-W is N=N or $N^+(O^-)$=N.